

Abstract

Amplification mixtures, kits, amplicons, kits and processes are provided for amplifying a nucleic acid. In particular, provided are processes which utilize an amplification mixture comprising a polymerase, a deoxynucleotidetriphosphate (dNTP) mixture which contains modified dNTPs, a first primer and a second primer. Further provided are dNTP mixtures which contain modified dNTPs for at least two of the four nucleotide triphosphates, which when incorporated into a polynucleotide, impart resistance to enzymatic degradation by an exonuclease at the sites of incorporation of the modified dNTPs. Also provided are the amplicons and vectors which incorporate the modified nucleotides.